SERFF Tracking #: AMLC-132157291 State Tracking #:

Company Tracking #: SRTCVADD RATES

State: District of Columbia Filing Company: Globe Life And Accident Insurance Company

TOI/Sub-TOI: L04I Individual Life - Term/L04I.103 Renewable - Single Life - Fixed/Indeterminate Premium

Product Name: SRTCVADD Rates

Project Name/Number: /

Filing at a Glance

Company: Globe Life And Accident Insurance Company

Product Name: SRTCVADD Rates
State: District of Columbia

TOI: L04I Individual Life - Term

Sub-TOI: L04I.103 Renewable - Single Life - Fixed/Indeterminate Premium

Filing Type: Rate

Date Submitted: 11/15/2019

SERFF Tr Num: AMLC-132157291
SERFF Status: Submitted to State

State Tr Num:

State Status:

Co Tr Num: SRTCVADD RATES

Implementation

Date Requested:

Author(s): David Mather

Reviewer(s):

Disposition Date:
Disposition Status:
Implementation Date:

SERFF Tracking #: AMLC-132157291 State Tracking #:

Company Tracking #: SRTCVADD RATES

State: District of Columbia Filing Company: Globe Life And Accident Insurance Company

TOI/Sub-TOI: L04I Individual Life - Term/L04I.103 Renewable - Single Life - Fixed/Indeterminate Premium

Product Name: SRTCVADD Rates

Project Name/Number: /

General Information

Project Name: Status of Filing in Domicile: Not Filed

Project Number: Date Approved in Domicile:

Requested Filing Mode: Review & Approval Domicile Status Comments: Rate filing not required in

Nebraska

Explanation for Combination/Other: Market Type: Individual Submission Type: New Submission Individual Market Type:

Overall Rate Impact: Filing Status Changed: 11/15/2019

State Status Changed:

Deemer Date: Created By: David Mather

Submitted By: David Mather Corresponding Filing Tracking Number:

Filing Description: NAIC: 290-91472 FEIN: 63-0782739

RE: SRTCVADD Rate Filing

Attached for your review and approval is a copy of the above mentioned rates for form SRTCVADD. SRTCVADD was filed and approved by your department on 11/6/19 under SERFF Tracking Number AMLC-132113209.

Premium rate schedule and other supporting documentation are provided, as required.

We are looking forward to your expedient review and approval of this form. If you have any questions or concerns, please feel free to contact me at (214) 250-5174, or by e-mail at drmather@Globe.Life.

Sincerely,

David R Mather

Team Lead, Product Compliance

Company and Contact

Filing Contact Information

David Mather, Compliance Lead Analyst drmather@Globe.Life 3700 S. Stonebridge Drive 214-250-5174 [Phone]

McKinney, TX 75070

Filing Company Information

Globe Life And Accident Insurance CoCode: 91472 State of Domicile: Nebraska Company Group Code: 290 Company Type: Life and

P.O. Box 8080 Group Name: Liberty National Health

McKinney, TX 75070 FEIN Number: 63-0782739 State ID Number:

(800) 801-6831 ext. [Phone]

Filing Fees

Fee Required? No

State: District of Columbia Filing Company: Globe Life And Accident Insurance Company

TOI/Sub-TOI: L04l Individual Life - Term/L04l.103 Renewable - Single Life - Fixed/Indeterminate Premium

Product Name: SRTCVADD Rates

Project Name/Number: /

Retaliatory? No

Fee Explanation:

State: District of Columbia Filing Company: Globe Life And Accident Insurance Company

TOI/Sub-TOI: L04I Individual Life - Term/L04I.103 Renewable - Single Life - Fixed/Indeterminate Premium

Product Name: SRTCVADD Rates

Project Name/Number: /

Rate Information

Rate data does NOT apply to filing.

State: District of Columbia Filing Company: Globe Life And Accident Insurance Company

TOI/Sub-TOI: L04I Individual Life - Term/L04I.103 Renewable - Single Life - Fixed/Indeterminate Premium

Product Name: SRTCVADD Rates

Project Name/Number: /

Rate/Rule Schedule

Item	Schedule		Affected Form Numbers			
No.	Item	Document Name	(Separated with commas)	Rate Action	Rate Action Information	Attachments
	Status					
1		SRTCVADD Premium Rates	SRTCVADD	New		DC - SRTCVADD.xlsx,

State: District of Columbia Filing Company: Globe Life And Accident Insurance Company

TOI/Sub-TOI: L04I Individual Life - Term/L04I.103 Renewable - Single Life - Fixed/Indeterminate Premium

Product Name: SRTCVADD Rates

Project Name/Number: /

Attachment DC - SRTCVADD.xlsx is not a PDF document and cannot be reproduced here.

State: District of Columbia Filing Company: Globe Life And Accident Insurance Company

TOI/Sub-TOI: L04I Individual Life - Term/L04I.103 Renewable - Single Life - Fixed/Indeterminate Premium

Product Name: SRTCVADD Rates

Project Name/Number: /

Supporting Document Schedules

Satisfied - Item:	Actuarial Justification
Comments:	
Attachment(s):	SRTCVADD ActMemo (E States).pdf
Item Status:	
Status Date:	

Globe Life and Accident Insurance Company

McKinney, Texas

Actuarial Memorandum

Term Life Insurance Rider

Rider Form: SRTCVADD

This actuarial memorandum is an actuarial report. The purpose of this report is to be used by state officials as a product description, to demonstrate that nonforfeiture of the product meets the minimum requirements of your state, and to declare the statutory reserve basis. The product description is a simplified version of the actual form language, presenting the features relevant to the nonforfeiture calculations where applicable. This report is not intended to be used for any other purpose or by any other parties.

Globe Life and Accident Insurance Company Term Life Insurance Rider Rider Form: SRTCVADD

TYPE:

Endorsement to add additional coverage to a nonparticipating term base life insurance policy.

BENEFITS:

The level death benefit expires at the expiration of the base policy to which this rider is attached. Benefits are reasonable in relation to the premium charged. The minimum issue amount is \$1,000.

PREMIUMS:

Premium pattern will be the same as the premium pattern of the base policy to which this rider is attached.

ISSUE AGE RANGE:

18-80 (premiums may be developed in the future to expand the issue age range)

BASIS OF NONFORFEITURE VALUES

Mortality: 2017 CSO - age last birthday - ultimate - sex-distinct - composite smoker-nonsmoker

Curtate

Interest Rate: 4.50%

Cash Values: Equal to or greater than the minimum required by the Standard Nonforfeiture Law.

Cash values per unit are rounded to high cent.

Reduced Paid-Up: Level to the end of the term, rounded to high dollar

Extended Term Insurance: Level, term period rounded to at least high day

BASIS OF MINIMUM RESERVE REQUIREMENTS:

Reserves are based on the Valuation Manual Minimum Standards VM-20, Requirements for Principles-Based Reserves for Life Products (VM-20). The reserves are calculated using the Net Premium Reserve (NPR) plus the excess, if any, of the Deterministic Reserve as described in VM-20, plus the excess, if any, of the Stochastic Reserve as described in VM-20. On each valuation date, the reserves for the policy will be computed in accordance with the principles contained in VM-20 and applicable state regulations.

The valuation interest rate under this term product is currently 4.50% in accordance with VM-20. The mortality basis currently is 2017 CSO sex-distinct, composite smoker, ultimate, age last birthday.

The NPR reserve for this term product be calculated pursuant to the prescribed method in Section 3 of VM-20.

The Basis of Reserves may be adjusted for future new business if required or allowed by prevailing valuation laws.

CHARGES:

Initial acquisition expense charges, expense charges, surrender charges and cost of insurance (COI) charges are <u>not</u> applicable. This is a traditional nonparticipating life insurance product. This is <u>not</u> a universal life and <u>not</u> an interest sensitive product.

ILLUSTRATIONS:

Not Required. All elements are guaranteed. This form does not have indeterminate premiums.

This form will not be marketed with illustrations.

Globe Life and Accident Insurance Company Term Life Insurance Rider Rider Form: SRTCVADD

A. General Formulas (Per Unit Basis, 1 Unit = \$5,000)

Definitions DB_t =

DB_t = Death Benefit at beginning of Policy Year t

For products with level benefit, DB_t = DB₁ for all t

b = age benefit period ends p = age premium period ends

 $_{t}$ PVBEN' $_{x:b-x-\overline{\Box}}$ = Present Value of Future Benefits for issue age x at duration t (curtate basis, used for nonforfeiture calculations) = $(\sum_{k=1}^{b-x-1} DB_{k+1} * C_{x+k}) / D_{x+t}$

For products with \$5,000 level benefit, $_{1}PVBEN'_{x:b-x\cdot \lceil} = 5000A'_{x+1:b-x\cdot \lceil}$ and $_{0}PVBEN'_{x:b-x^{-}\rceil} = 5000A'_{x:b-x^{-}\rceil}$

GPR_k = Gross Premium Ratio in Policy Year k+1 = (Gross Prem in Pol Yr k+1) / (Gross Prem in Pol Yr 1)

k= 0, 1, 2, 3,, p-x-1

ä"x+t;p-x-l"] = Present Value of the future gross premium ratios at duration t for issue age x (curtate basis)

 $\sum_{k=0}^{p-(x+t)\cdot 1}$ (GPR_{k+l}) $v^{\wedge}_{k}p_{x+t}$; where GPR_{k} is the Gross Premium Ratio in Policy Year k+1

B. Nonforfeiture Values

1.) Cash Values per Unit

$$b \cdot x P'_{x:b \cdot x^-}^{NLP} = Nonforfeiture Net Level Premium = $P'_{x:b \cdot x^-}^{NLP} = {}_{0}PVBEN'_{x:b \cdot x^-} / \ddot{a}_{x:p \cdot x^-}$$$

 $AAI = \begin{pmatrix} Min [10,b-x] \\ (\Sigma DB_t) / (Min[10,b-x]) = Average Amount of Insurance \\ t=1 \end{pmatrix}$

 $_{b-x}P'_{x:b-x^-}$ = Nonforfeiture Factor = $P'_{x:b-x^-}$ = ($_{0}PVBEN'_{x:b-x^-}$ + .01AAI + 1.25 * Min[$P'_{x:b-x^-}$ NONFORM NUMBER | .04AAI]) / $\ddot{a}''_{x:p-x^-}$

 $_{t}CV_{x} = Max \left[{_{t}PVBEN'_{x:b-x:t-} - P'_{x:b-x-} \cap * \ddot{a}"_{x+t:p-x:t-} , 0 \right], round high cent}$

2.) Reduced Paid Up Insurance per Unit

 $_{l}PU_{x} = _{l}CV_{x} / A'_{x+l:b-x-l^{-}}$, rounded to high dollar

3.) Extended Term Insurance

Years = y = Largest integer for which DB_{t+1} * A'_{x+t:y-1} <= tCV_x

 $\begin{aligned} \text{Days} &= \text{d} = 365 * (_{\text{i}}\text{CV}_x - \text{DB}_{\text{t+1}}^*\text{A'}_{x+\text{t};y^-\text{j}}) / (\text{DB}_{\text{t+1}}^*\text{A'}_{x+\text{t};y^+\text{l}^-\text{j}} - \text{DB}_{\text{t+1}}^*\text{A'}_{x+\text{t};y^-\text{j}}), \\ &\text{d is rounded to the next highest integer} \end{aligned}$

ETI period will be at least y years and d days.

C. Sample Calculation

Male Issue Age 35; \$5,000 Coverage per Unit (for \$5,000 face amount endorsement); End of Policy Year 20 Term to Age 80 2017 CSO-ALB-Male at 4.50%

Definitions

 $DB_t =$ Death Benefit at beginning of Policy Year t = 5000 for all t

b = age benefit period ends = 80

age premium period ends = 80 p =

Attained	Annual	
<u>Age</u>	Prem/Unit	
35	36.08	
36-40	45.23	
41-45	57.74	
46-50	73.84	
51-55	94.56	

Attained	Annual
<u>Age</u>	Prem/Unit
56-60	125.45
61-65	169.71
66-70	236.33
71-75	339.16
76-79	461.20

$$\frac{\text{1.) Cash Values per $5,000 Unit}}{\text{80-35} \text{P'}_{35;80-35}} = \frac{\text{NLP}}{\text{Nonforfeiture Net Level Premium}} = \text{P'}_{35;45} = \frac{\text{NLP}}{\text{NS}} = \frac{\text{PVBEN'}_{35;45}}{\text{AS}_{35;45}} / \ddot{a}_{35;45} = 504.5621985 / 18.94518347 = 26.63274279}$$

AAI =
$$\begin{array}{c} \text{Min} \, [10,80\text{-}35] \\ \text{(} \, \Sigma \, \, DB_{l} \, \,) \, \, / \, (\, Min[10,80\text{-}35] \,) \, = \, \text{Average Amount of Insurance} = 5000 \\ \text{(} \, \Sigma \, \, DB_{l} \, \,) \, \, / \, (\, Min[10,80\text{-}35] \,) \, \end{array}$$

$$_{80-35}P'_{35:80-35}^{-A} = Nonforfeiture\ Factor = P'_{35:45}^{-A} = (5000\ A'_{35:45}^{-} + .01AAI + 1.25 * Min[P'_{35:45}^{-}]^{NLP}, .04AAI]) / ä''_{35:45}^{-} = (504.5621985 + .01(5000) + 1.25 * Min[26.63274279, .04(5000)]) / 54.31617288 = 10.82280094$$

$$_{20}\text{CV}_{35}$$
 = Max [5000 A' $_{35+20:80-35-20^-|}$ - P' $_{35:80-35^-|}$ * ä" $_{35+20:80-35-20^-|}$, 0], round high cent = 5000 A' $_{55:25^-|}$ - P' $_{35:45^-|}$ * ä" $_{55:25^-|}$ = 895,3420907 - (10.82280094) (81.20578148) = 16.4671 ==> 16.47

2.) Reduced Paid Up Insurance per \$5,000 Unit

$$_{20}$$
PU₃₅ = $_{20}$ CV₃₅ / A'_{35+20:80-35-20}-, rounded to high dollar = $_{20}$ CV₃₅ / A'_{55:25}-, = 16.47 / 0.1790684181 = 91.9760 ==> 92

3.) Extended Term Insurance

Days = d =
$$365 * ({}_{20}\text{CV}_{35} - 5000\text{A'}_{55:0}\Box{--}) / (5000\text{A'}_{55:0}\Box{--}) - 5000\text{A'}_{55:0}\Box{--})$$
, rounded to the next highest integer = $365 * (16.47 - 0.00) / (20.19138756 - 0.00)$ = $297.7284 ===> 298$

ETI period will be at least 0 years and 298 days.

Globe Life and Accident Insurance Company Term Life Insurance Rider Rider Form: SRTCVADD

I have read the form and supporting material submitted with this filing.

I hereby certify, to the best of the undersigned's knowledge and belief,

This filing is in compliance with the applicable laws and regulations of this state, including the nonforfeiture values and reserves developed herein equal or exceed the minimum requirements for the standard nonforfeiture (Standard Nonforfeiture Law for Life Insurance, Model 808), including the consistent progress of cash surrender values ("smoothness test"), valuation laws, appropriate actuarial guidelines, and IRS Section 7702/7702A.

No assumptions or provisions unfairly discriminate in availability, rates, benefits, or any other way for individuals of the same class, equal expectation of life, and degree of risk or hazard. The use of variability in this form is administered in a uniform and non-discriminatory manner.

I am a member of the American Academy of Actuaries that meets its Qualification Standards to render this opinion, and employed by the Globe Life and Accident Insurance Company.

Joseph M. Kaner, ASA, MAAA

Associate Actuary, Life Forms & Rates

June 21, 2019

Date